CITY OF FARGO SPECIFICATIONS SODDING

PART 1 DESCRIPTION OF WORK

This work to be done under this section of the Specifications and the accompanying plans consists of the furnishing and laying of live sod on the slopes, ditches, boulevards, or other locations shown on the plans or as designated by the Engineer.

PART 2 MATERIAL

2.1. TOPSOIL

All topsoil shall be black sandy loam. It shall be free from surface vegetation, objectionable weeds, and shall be free from lumps, stones or other debris.

2.2. SOD

Sod shall consist of a dense well-rooted growth of permanent and desirable grasses native to the general locality, and shall be free of weeds and undesirable grasses. At the time the sod is cut, the grass shall have a length of approximately 2 inches. The sod shall be free of grass clippings and shall be well moistened to prevent crumbling or breaking during cutting operations. The thickness shall be as uniform as possible, approximately 1 1/2 inches or more, depending on the nature of the sod, so that practically all of the dense root system of the grasses will be retained and exposed. The sod strip will be cut in uniform strips and will be able to be handled without undue tearing or handling. Peat sod containing more than 20% organic material will not be allowed.

2.3. FERTILIZER

Fertilizer shall be a commercial product and shall be 10-10-10 at an application rate of 220 pounds per acre (5 pounds per 1,000 sq. Ft.). Fertilizer shall be free flowing and suitable for application with mechanical equipment, delivered in sealed containers, fully labeled, and bearing the name, trade name or trade mark and warranty of the producer.

2.4. EQUIPMENT

The equipment shall be readily adaptable to the work. Small tractors, rakes and hand equipment of the lawn and garden type will be acceptable for this work.

PART 3 CONSTRUCTION

3.1. PREPARATION OF THE SOD BED

The area to be sodded shall have been previously constructed to the required cross section and contour, in accordance with Section #2000 for excavation and subgrade preparation. When required, boulevard filling shall be done in accordance with Section # 2000, Part 3, Section 3.7. The area to be sodded shall be free from stones, roots, or other undesirable material.

The soil shall be loosened and brought to a reasonably fine granular texture, to a depth of not less than 1 inch by means of equipment or hand methods adapted to the purpose. When abutting existing grass or sod, the existing grass/sod shall be removed using a method that provides a straight edge of sufficient depth to allow the new sod to be placed abutting that edge, without the presence of an unsightly ridge, and provide a smooth continuous appearance. When abutting ADA ramps, sidewalk, curb & gutter, the existing grass/sod shall be removed to a minimum width of 1.0' using a method that provides a straight edge of sufficient depth to allow the new sod to be placed abutting that edge, without the presence of an unsightly ridge, and provide a smooth continuous appearance. Areas of existing boulevard that have settled or where the existing boulevard is blocking drainage, the Contractor shall remove the existing sod and level the area by filling with black dirt, or by removing the excess dirt prior to placing the new sod. Approximately 24 hours prior to the sod placement, the earth bed shall be thoroughly moistened to reduce stress.

3.2. FERTILIZER

Prior to the placement of the new sod, the earth bed shall be fertilized at the specified rate.

3.3. PLACING THE SOD

The earth bed shall be moistened to the loosened depth, if not sufficiently moist, and the sod shall be placed thereon within 24 hours of being cut.

Unless otherwise required, the sod on slopes shall be laid in horizontal strips beginning at the bottom of the slope and working upward. When placing sod in ditches or in the construction of sod ditch checks or similar appurtenances, the long length of the strip shall be laid at right angles to the direction of flow of the water. Sod shall be laid so that the joints caused by the abutting

ends are not continuous. Each sod strip shall be laid so that it will fit snugly against the strip previously laid.

As the sod is being laid, it shall be rolled or firmly but lightly tamped with suitable wooden or metal tampers sufficient only to "set" or press the sod into the underlying soil.

At such points where water will start flowing over a sodded area, the upper edges of the sod strips shall be turned into the soil to be below the adjacent area, and a layer of earth placed over this juncture, which earth shall be firmly compacted to conduct the surface water over the upper edge of the sod.

At the limits of the sodded areas, where practicable or feasible, the ends of the sod strips shall be placed to effect a broken line, and the ends turned in and treated as above described. Any sod that has been frozen prior to laying, or is laid on a frozen bed, or is laid in conditions in which the sod does not establish itself during such following growing season shall be removed and replaced by the Contractor at his expense. Generally, sodding shall only be done at such time of the year when climactic conditions of temperature and moisture are most adaptable for growth. No sod shall be placed when the temperature is below 32° F.

3.4. STAKING THE SOD

On all slopes steeper than 1 foot vertical to 4 feet horizontal, the sod shall be staked or pegged with pieces of lath or small stakes 12 inches in length, spaced as needed by the nature and steepness of the slope, from 18 inches to 36 inches apart along the longitudinal axis of the sod strip. Stakes shall be placed near the top of the strip and driven through and almost flush with the sod surface.

3.5. WATERING OF THE SOD

The sod shall be watered immediately after placement. The Contractor shall be responsible for maintaining and daily watering of the sod for a period of two weeks after installation. Watering shall be done by sprinkling or by a method that does not allow substantial runoff from the sodded areas. Water may be obtained from the nearest City of Fargo hydrant at no cost to the Contractor; however the use of the hydrant shall be under the regulations of the City Water Department. When sod is placed on boulevards of built-up properties, the Contractor shall provide written notice to the property owner that the Contractor's watering responsibility has expired and watering and maintenance of the new sod is being transferred to the property owner.

PART 4 GUARANTEE, MEASUREMENT & PAYMENT

4.1. GUARANTEE

The guarantee shall cover the contract as to workmanship and material for a period of six (6) months from the date of final acceptance and payment.

4.2. METHOD OF MEASUREMENT

Measurement of the sodded area will be determined by measuring the surface area of the area sodded. The unit of measure will be the square yard. Sodding will be paid for within a width limit. Sodding limits will be as directed below or as directed by the Engineer or as shown on the plans.

When sodding is part of a street rehabilitation or reconstruction project wherein large lengths of curb are replaced, the maximum width of sodding will be 5 feet unless the boulevard is less than 6 feet wide from the back of the new curb to the front of the sidewalk, in which case the entire boulevard will be resodded.

4.3. METHOD OF PAYMENT

Sodding will be paid for at the contract unit price per square yard. The payment of the contract unit price shall be full compensation for preparing the earth bed, furnishing and applying the fertilizer, furnishing, placing, staking and watering the sod, and all labor, equipment, tools, and incidentals necessary to complete the work in accordance with these Specifications.

4.4. OTHER COSTS

All other costs for work necessary to properly complete the work specified herein shall not be bid items; the costs shall be charged to other items unless a bid item is specifically included on the bid sheet.